1. (currrently amended) A medical system comprising:

a medical instrument to be guided in a patient body,

an X-Ray acquisition ~~means~~ system ~~for~~ which acquir~~esing~~ a two-dimensional X-ray image of said medical instrument,

an ultrasound acquisition ~~means~~ system for acquiring a three-dimensional ultrasound data set of said medical instrument using an ultrasound probe,

~~means for~~ a localizer which ~~providing~~ provides a localization of said ultrasound probe within a referential of said X-ray acquisition ~~means~~ system,

~~means for~~ a selector operable to select~~ing~~ a region of interest around said medical instrument in the three-dimensional ultrasound data set, that define~~s~~ a first localization of said region of interest within a referential of said ultrasound acquisition ~~means~~ system,

~~means for~~ a convert~~oring~~ which converts said first localization of said region of interest within said referential of the ultrasound acquisition ~~means~~ system into a second localization of said region of interest within said referential of the X-ray acquisition ~~means~~ system, using said localization of the ultrasound probe,

a ~~means for~~ generat~~ionng~~ and display~~ing~~ screen which displays a bi-modal representation of said medical instrument in which said two-dimensional X-ray image and the three-dimensional ultrasound data included in said region of interest are combined using said second localization.

2. (currrently amended) A system as claimed in claim 1, wherein said ~~means for~~ selector is operable to select~~ing~~ a region of interest ~~are~~ intended to define a reference plane in which a part of said medical instrument is included.

3. (original) A system as claimed in claim 2, wherein said region of interest is a 2D ultrasound image obtained by sampling said 3D ultrasound data set over said reference plane.

4. (original) A system as claimed in claim 2, wherein said region of interest is obtained by cropping a 3D ultrasound data subset, which lies behind said reference plane or by cropping a slab which is formed around said reference plane.

5. (currrently amended) A system as claimed in claim 4, wherein said generati~~on and display screen is~~ng ~~means are~~ intended to generate a volume rendered view of said region of interest within said 3D ultrasound data set.

6. (currrently amended) A system as claimed in claim 1, wherein said ~~probe~~ localiz~~er is~~ation ~~means are~~ intended to localize an active localizer, which has been arranged on said ultrasound probe.

7. (currrently amended) A system as claimed in claim 1, wherein said ultrasound probe is equipped with at least three non aligned and interdependent radio-opaque markers and
said localiz~~er is~~ation ~~means are~~ intended to localize said markers in at least a first 2D X-ray image having a first orientation angle in said referential.

8. (currrently amended) A system as claimed in claim 7, wherein said localiz~~er is~~ation ~~means are~~ intended to further localize said markers in a second 2D X-ray image having a second orientation angle in said referential.

9. (currrently amended) A system as claimed in claim 1, wherein said select~~or is operable to~~ion ~~means comprise means for~~ detect~~ing~~ said medical instrument within said region of interest of the 3D ultrasound data set and
said generati~~on and display screen is~~ng ~~means are~~ intended to give to the points of the detected medical instrument in said bimodal representation the X-ray intensity values of the corresponding points in the 2D X-Ray image.

10. (currrently amended) A system as claimed in claim 1, comprising
~~means for~~a segmenter operable to segment~~ing~~ a wall tissue region in the 3D ultrasound data set and
said generati~~on and display screen is~~ng ~~means are~~ intended to give to the points belonging to said wall tissue region the ultrasound intensity values of the corresponding points of said region of interest.

11. (currrently amended) A system as claimed in claim 1, wherein the X-Ray acquisition ~~means are~~system is intended to provide live two-dimensional X-Ray

images and the ultrasound acquisition ~~means~~ system live three-dimensional ultrasound data sets.

12. (currrently amended) A system as claimed in claim 11, comprising a controll<u>er</u>~~ing means~~ for periodically triggering the probe localiz<u>er</u>~~ation means~~.

13. (currently amended) A system as claimed in claim 11, comprising
a compensator operable to~~means for~~ compensat<u>e</u>~~ing~~ a motion between a current three-dimensional ultrasound data set acquired at a current time and a previous three-dimensional ultrasound data set acquired at a previous time.

14. (original) A method of guiding a medical instrument in a patient body, comprising the steps of:
acquiring a two-dimensional X-ray image of said medical instrument using an X-ray acquisition system,
acquiring a three-dimensional ultrasound data set of said medical instrument using said ultrasound probe and an ultrasound acquisition system,
localizing said ultrasound probe in a referential of said X-ray acquisition system,
selecting a region of interest of said medical instrument within said 3D ultrasound data set, that define a first localization of said region of interest within a referential of said ultrasound acquisition system,
converting said first localization within said referential of said ultrasound acquisition system into a second X-Ray localization within said referential of the X-ray acquisition system,
generating and displaying a bimodal representation of said medical instrument in which said two-dimensional X-ray image and the three-dimensional ultrasound data included in said region of interest are combined using said second localization.